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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,027	06/24/2003	Gunter-Horst Rohm	22587	2606

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EXAMINER

ABDELWAHED, ALI F

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,027

Applicant(s)

ROHM, GUNTER-HORST

Examiner

Ali Abdelwahed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- 7) ☒ Claim(s) 10 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on May 14, 2003. It is noted, however, that applicant has not filed a certified copy of the 10321820.3 application as required by 35 U.S.C. 119(b).

Specification

The disclosure is objected to because of the following informalities:

It is suggested that in:

Page 10, line 6, delete "9" and insert --10--.

Page 13, line 13, delete "42" and inset --45--.

Appropriate correction is required.

A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the faxed copy of the originally filed specification is not clearly printed and contains missing letters of incompletely spelled words.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed

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within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Claim Objections

Claims 8, 9, and 16 are objected to because of the following informalities:

It is suggested that in:

Claims 8 and 9, line 1, delete "4" and insert --5--.

Claim 16, line 2, delete "on" and insert --an--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,000,642 to Kawasaki.

Kawasaki discloses a drill chuck comprising a chuck body (1) extending along and rotatable about an axis and formed with an axially forwardly open tool seat (7) and with a plurality of angled guides (9) opening axially forward into the seat (see fig.1).

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Respective jaws (10) in the guides having toothed outer edges (11), an inner sleeve (13) having a screw thread (12) threadedly engaging the jaw outer edges (see fig.1), and axially shiftable on the body (see column 2, lines 35-38), and rotatable about the axis to axially displace the jaws (see column 2, lines 28-35). A mechanism (23') engaged between the inner sleeve and the chuck body for axially displacing the inner sleeve relative to the body and thereby axially displacing the jaws (see fig. 3, and column 4, lines 41-56).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,807,745 to Bent.

Bent discloses a drill chuck comprising a chuck body (10) extending along and rotatable about an axis and formed with an axially forwardly open tool seat (13) and with a plurality of angled guides (14) opening axially forward into the seat (see figs. 3, 6). Respective jaws (15) in the guides having toothed outer edges (27), an inner sleeve (25) having a screw thread (26) threadedly engaging the jaw outer edges (see figs. 3, 6), and axially shiftable on the body (see column 2, lines 61-62), and rotatable about the axis to axially displace the jaws (see column 2, lines 10-15). A mechanism (30) engaged between the inner sleeve and the chuck body for axially displacing the inner sleeve relative to the body and thereby axially displacing the jaws (see column 2, lines 54-63).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-9 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bent in view of U.S. Patent No. 6,550,785 B2 to Rohm.

Bent discloses the chuck further comprising an outer sleeve (20) surrounding the inner sleeve and the mechanism being actuated by the outer sleeve (see fig. 6). The mechanism includes another screw thread (29) between the outer sleeve and the chuck body (see fig. 3). The inner sleeve screw thread is of steeper pitch than the outer sleeve screw thread (see fig. 6). The outer sleeve is provided with a ring (28) formed with the outer sleeve screw thread, rotationally coupled to the outer sleeve, and bearing axially forward on the inner sleeve (see figs. 3, 6, and column 2, lines 16-36). A roller bearing (36) located between the outer sleeve ring and a rear end of the inner sleeve (see fig. 3). The outer sleeve ring has an axially elongated inner collar formed with the outer sleeve screw thread (see figs. 5, 6).

However, Bent fails to teach a limited slip coupling between the inner sleeve and the outer sleeve comprising a spring element coupled angularly to one of the sleeves and couplable angularly to the other of the sleeves, which is formed with a radially open pocket and the spring element is formed with a radially projecting bump engageable in the pocket. The chuck body being formed with annular row of radially projecting saw teeth, the spring element having a tip engageable in the teeth when the bump is

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disengaged from the pocket, and the tip can slide in an angular direction on them and is blocked against sliding in the opposite direction on them. The teeth have an axial length substantially longer than an angular length of the spring element tip, whereby the spring element tip can move axially while remaining engaged with the teeth. The outer sleeve is made of metal and is provided with a plastic cam ring forming the pocket. A shield cap is engaged over a front end of the outer sleeve and rotatable about the axis, and is rotatably mounted on the outer sleeve or the chuck body. The outer sleeve ring is formed with axially through going chip-passing holes.

Nevertheless Rohm teaches a chuck (1) comprising a limited slip coupling (23) between the inner sleeve and the outer sleeve comprising a spring element (34) coupled angularly to one of the sleeves and couplable angularly to the other of the sleeves (see fig. 5), which is formed with a radially open pocket (33) and the spring element is formed with a radially projecting bump (35) engageable in the pocket (see fig. 5). The chuck body being formed with annular row of radially projecting saw teeth (22), the spring element having a tip (21) engageable in the teeth when the bump is disengaged from the pocket (see fig. 6), and the tip can slide in an angular direction on them and is blocked against sliding in the opposite direction on them (see fig. 6). The teeth have an axial length substantially longer than an angular length of the spring element tip, whereby the spring element tip can move axially while remaining engaged with the teeth (see fig. 5, 6). The outer sleeve is made of metal (see column 3, lines 58-59) and is provided with a plastic cam ring (27) forming the pocket (see fig. 5). A shield cap (31) rotatable about the axis is engaged over a front end of the outer sleeve, and is

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mounted on the outer sleeve or the chuck body (see fig.1). The outer sleeve ring is formed with axially through going chip-passing holes (see fig.1, defined by the axial holes located in the top ring adjacent the threaded hole 3, and the rear end portion of the chuck jaws 6 in the retracted position). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the chuck of Bent, in view of Rohm, such that it would provide the chuck of Bent with the concept of the aforementioned limitations for the purpose of preventing loosening of the chuck jaws during operation.

Allowable Subject Matter

Claims 10 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Abdelwahed whose telephone number is (571) 272-4417. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner or the examiner's supervisor.

AA
08/10/2006


MONICA CARTER
SUPERVISORY PATENT EXAMINER